washington state department of community, trade and economic development

Growth Management Services

Urban Densities – Central Puget Sound Edition

King, Kitsap, Pierce, and Snohomish Counties

Guidance Paper

September 2004

The Growth Management Act (GMA) was enacted in response to a growing realization that some of the qualities making Washington a great place to live were at risk because of development patterns resulting from uncoordinated and unplanned growth. In response to this risk, the Washington State Legislature established common goals in the GMA to direct planning. Within these goals and throughout the GMA is an imperative to coordinate plans that focus new development, redevelopment, and the public facilities necessary to serve development in urban areas. A fundamental principle of the GMA is that lands within urban growth areas (UGAs) should be developed as compact, urban communities served with adequate public facilities. This preference is expressed in the following GMA goals:

(1) Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner. [RCW 36.70A.020(1)]
(2) Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development. [RCW 36.70A.020(2)]
(4) Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.

This Washington State Department of Community, Trade and Economic Development (CTED) document provides guidance to help communities determine an appropriate range of urban residential densities for their community and reviews a range of regulatory tools and housing types that can help facilitate the development of communities that are compact, functional, and livable. Communities within the Central Puget Sound (King, Kitsap, Pierce, and Snohomish counties) can also benefit from an understanding of how the Central Puget Sound Growth Management Hearings Board (CPSGMHB) has applied the GMA goals in several cases. This paper reviews these cases as well.

Defining Sprawl and Its Consequences

Defining characteristics of sprawl were described in CTED's second guidebook on establishing urban growth boundaries. These characteristics include:

> Scattered poorly planned urban development that occurs particularly in urban fringe and rural areas and frequently invades land important for environmental and natural resource protection. Urban sprawl typically manifests itself in one or more of the following

> patterns: (1) leapfrog development (when new development is sited away from an existing urban area, bypassing vacant parcels located in or closer to the urban area that are suitable for development); (2) strip development (when large amounts of commercial, retail, and often multifamily residential development are located in a linear pattern along both sides of a major arterial and, typically, accessing directly onto the arterial); and (3) large expanses of low-density, single-family dwelling development.[1]

Planning research for the past 30 years has documented the public and private costs of sprawling development patterns versus more compact and well-coordinated development patterns. Sprawl constitutes one of the most expensive forms of development to serve with public services and facilities.[2] The per capita costs to provide public services tend to be lower at compact urban densities.[3] This research documented the problems that were at the heart of the concerns the GMA was adopted to address. CTED's second guidebook on establishing UGAs contains an extensive discussion of both the negative consequences of sprawl and the benefits of more compact forms of development.[4]

The issue of sprawl and compact development was first addressed by the CPSGMHB in 1995 in *Bremerton, et al. v. Kitsap County*. The CPSGMHB decision included an extensive discussion of sprawl, compact development, and the centrality of these issues in the GMA. The board further noted eight major consequences of sprawl:

(1) It needlessly destroys the economic, environmental, and aesthetic value of resource lands.
(2) It creates an inefficient land use pattern that is very expensive to serve with public funds.
(3) It blurs local government roles, fueling competition, redundancy, and conflict among those governments.
(4) It threatens economic viability by diffusing rather than focusing needed public infrastructure investments.
(5) It abandons established urban areas where substantial past investments, both public and private, have been made.
(6) It encourages insular and parochial local policies that thwart the siting of needed regional facilities and the equitable accommodation of locally unpopular land uses.
(7) It destroys the intrinsic visual character of the landscape.
(8) It erodes a sense of community, which, in turn, has dire social consequences.[5]

The board also specifically recognized the pattern of development called for in the GMA is a departure from the pattern of how land had generally developed in the preceding 20 years.

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[1] *The Art and Science of Designating Urban Growth Areas – Part II,* CTED, March 1992, p. 35.

[2] *The Costs of Sprawl: Executive Summary and Detailed Cost Analysis,* Real Estate Research Corporation, U.S. Government Printing Office, Washington, D.C. (1974), p. 7.

[3] Muro, Mark and Puentes, Robert. *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns.* The Brookings Institution Center on Urban and Metropolitan Policy. 2004. *www.brookings.edu/urban*.

[4] *The Art and Science of Designating Urban Growth Areas – Part II,* CTED, March 1992, p. 12.

[5] *Bremerton, et al. v. Kitsap County,* CPSGMHB No. 95-3-0039c (Final Decision and Order, October 6, 1995), p. 20.

Recent public health research has identified a link between sprawl and a number of public health problems related to low levels of physical activity. Although the amount of physical activity is a personal choice, patterns of development that present barriers to walking, especially for children, are a significant contributing factor. People living in automobile dependent neighborhoods that suppress walking do walk less, weigh more, and are more likely to suffer from high blood pressure. They weigh an average of six pounds more than their counterparts in communities with better pedestrian amenities.[6] People in low-density communities that are not planned to facilitate walking are more likely to spend more time driving which impacts air quality and increases rates of asthma.[7]

Benefits of More Compact Development

Compact development is the antithesis of sprawl. Characteristics of compact communities include development that is contiguous to the existing urban areas and characterized by the coordinated provision of urban services and that includes a range of uses at urban densities, a variety of housing types, and a greater variety of transportation options. There are several benefits of a more compact pattern of urban development directly related to the goals of the GMA. There is evidence that residents in more compact communities tend to drive fewer miles than those in more sprawling areas.[8]

Higher urban densities also tend to reduce housing costs. More dense urban development implicitly results in smaller lot sizes for single-family homes and multifamily housing forms. Both of these typically provide less expensive housing options. These are some of the important reasons why the GMA emphasizes compact urban form as a strategy to accommodate growth. It is also why Goal 4, Housing, emphasizes provision of a variety of housing types at a range of densities. The greater the variety of housing types, the more segments of the population are likely to find housing that suits their needs.

What Is an Urban Density

Besides curbing sprawl, the GMA was intended to ensure efficient provision of urban services and encourage the provision of affordable housing. Although the term "urban density" is not defined in the act itself, urban growth is defined as:

> Intensive use of land for structures to such a degree that it is incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development and of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW

[6] Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., and Raudenbush, S. "Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity." *American Journal of Health Promotion*, Vol. 18, No. 1, 2003, pp. 47-57.

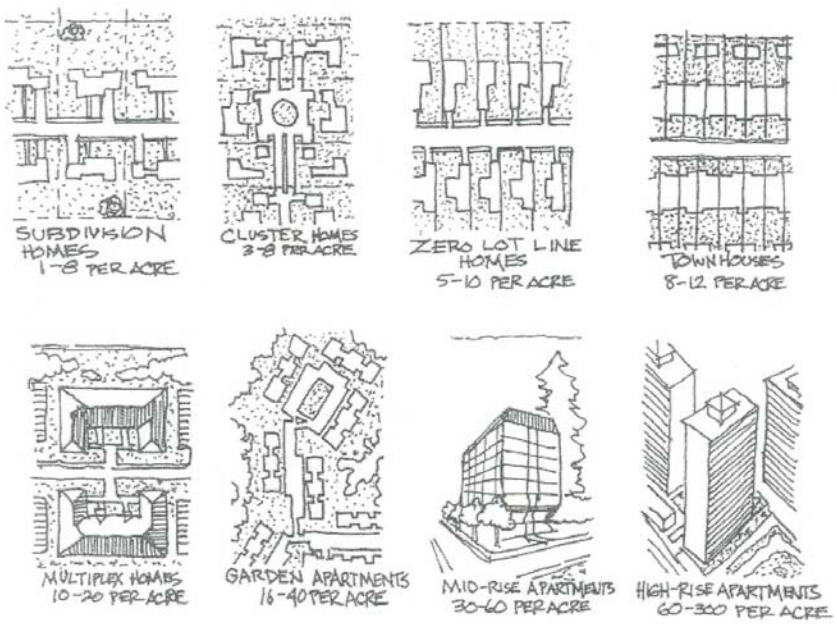
[7] Friedman, M.S., Powell, K.E., Hutwagner, L., Graham, L.M., and Teague, W.G. "Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma." *Journal of the American Medical Association*, Vol. 285, No. 7, 2001, pp. 897-905.

[8] *Creating Great Neighborhoods: Density in Your Community.* Local Government Commission, p. 6. *www.lgc.org.*

> 36.70a.170. . . When allowed to spread over wide areas, urban growth typically requires urban governmental services.[9]

The GMA also establishes a clear preference for urban growth to be contiguous with existing urban areas and provided with urban governmental services.[10] Urban densities are those that are not consistent with the use of land for resource use, not consistent with rural character, and that can be cost-effectively provided with urban governmental services. Urban services, such as stormwater and wastewater systems, are more cost-effective to provide as density increases because the costs of capital facilities is spread over more households and the distance between connections is lower.[11] Some urban services, such as public transit, are only viable above a certain density.

CTED's second guidebook on UGAs includes suggested considerations for setting urban densities.[12] Within the Central Puget Sound, the CPSGMHB has indicated that densities at 4 du/per acre or higher are compact urban development. Densities below that may be considered urban only if the record contains a clear rationale:



[9] RCW 36.70A.030.

[10] RCW 36370A.110.

[11] *Cost of Providing Government Services to Alternative Residential Patterns, Executive Summary*. Chesapeake Bay Program, U.S. Environmental Protection Agency Contract #68-WO0043. P ES-11.

> The board instead adopts as a general rule a "bright line" at four net dwelling units per acre. Any residential pattern at that density, or higher, is clearly compact urban development and satisfies the low end of the range required by the act. Any larger urban lots will be subject to increased scrutiny by the board to determine if the number, locations, configurations, and rationale for such lot sizes complies with the goals and requirements of the act, and the jurisdiction's ability to meet its obligations to accept any allocated share of county-wide population. Any new residential land use pattern within a UGA that is less dense is not a compact urban development pattern, constitutes urban sprawl, and is prohibited. There are exceptions to this general rule. For example, 1- or 2.5-acre lots may be appropriate in an urban setting in order to avoid excessive development pressures on or near environmentally sensitive areas. However, this circumstance can be expected to be infrequent within the UGA and must not constitute a pattern over large areas.[13]

Calculating Density

Residential density is defined primarily as the number of dwelling units over a specified land area. When discussing density, it is critical to clarify whether one is referring to net or gross density. Gross density refers to total dwelling units divided by total land area. Net density refers to total dwelling units divided by total land area less unbuildable area.

When the CPSGMHB articulated 4 du/acre as a minimum urban residential density, the board was referring to net average density, in dwelling units per acre, across the development parcel. Factors such as the scale of the development and whether unbuildable land should be included in the calculation will affect the ultimate density a set of development regulations allows. When calculating densities for the purposes of determining whether a compact urban development of 4 du/acre or greater is permitted, the following factors are among those that should be considered:

- The CPSGMHB rejected an approach to governing density that focuses exclusively on the size of developed lots. Instead, the board has focused on the maximum density in du/acre permitted when parcels are subdivided. If a project includes lots of varying sizes, it could yield an average of at least 4 du/acre even if some relatively large lots are created. Thus, density is best calculated as the average net density across the development parcel.[14]

- All land within the urban area must be designated at appropriate urban densities.[15] Calculating average density across an entire subarea or city is not appropriate for this purpose. For example, an area zoned for multifamily housing designated for future densities of 20 du/acre would not serve to justify a pattern of 1-acre lots throughout the rest of city, even if the city or sub-area as a whole achieved an average net density of more than 4 du/acre. The appropriate measure is the density permitted as a net average across a development parcel.

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[12] *The Art and Science of Designating Urban Growth Areas – Part II*, CTED, March 1992, p. 19.

[13] *Bremerton, et al. v. Kitsap County*, CPSGMHB No. 95-3-0039c (Final Decision and Order, October 6, 1995), p. 35.

[14] *Benaroya, et al. v. City of Redmond*, CPSGMGB No. 95-03-0072 (Final Decision and Order, March 25, 1996), p. 33.

[15] *LMI v. Town of Woodway*, CPSGMHB No. 98-3-0012 (Final Decision and Order, January 8, 1999), p. 13.

Net density is the total number of dwelling units divided by the total buildable area. Land that is not buildable is generally subtracted from the gross area of the development parcel for the purposes of calculating net average density.[16] Jurisdictions should indicate in their development regulations which lands should be subtracted in the calculation.

Managing Growth's Impacts

Providing for compact, urban development throughout urban areas is an important aspect of managing growth. In limited circumstances, densities less than 4 dwelling units per acre may be necessary for other reasons. Some jurisdictions have zoned areas for less than urban densities to protect large areas of high value critical areas. The CPSGMHB ruled that densities below 4 du/acre may be permissible if supported by a "persuasive and well-documented justification of a unique area-wide circumstance."[17] "Area-wide" in this case means limited to a small area, and not citywide. In 1996, the CPSGMHB established the three-part "Litowitz test" defining circumstances under which low-density land use designations, adopted as a means of protecting critical areas, would be consistent with a city's duty to ensure compact urban development and prevent sprawl. Low-density zoning of 1 du/ac or lower, for example, may be used to protect critical area functions when the critical area in question is:

1. Large in scope.
2. Structure and functions are complex.
3. The rank order value is high.[18]

Since 1996, the three-part test has been used to review the record for a determination of whether the lower density designation was appropriately applied. In *LMI v. Woodway*, the board reviewed the record to determine if there was an adequate scientific basis for the determination that a particular property contained significant critical areas unsuitable for urban development. Finding no such justification, it concluded that the area was not properly designated. The consequence of this determination was that, when the board calculated the net average density for the parcel, it included the improperly designated critical area as buildable land and determined the land use designation for the parcel did not permit urban densities.[19]

To evaluate whether a low-density designation is appropriate, it is useful to consider how the low-density designation relates to the three criteria listed above. For example, an areawide collection of critical areas, such as a collection of associated wetlands, is larger in scope than isolated wetlands. Their functions and values as a collection may be greater than what could be protected by application of the critical areas ordinance itself. An area that contains overlapping and interrelated types of critical areas, such as geologically hazardous areas, wetlands, and riparian areas, will have a complex structure and function. Applying the critical areas ordinance

[16] *Benaroya*, p. 33.

[17] *Bremerton, et al. v. Kitsap County*, CPSGMHB No. 95-3-0039c (Final Decision and Order, October 6, 1995), p. 33.

[18] *Litowitz v. City of Federal Way*, CPSGMHB No. 96-3-0005, (Final Decision and Order, July 22, 1997), p. 12.

[19] *LMI v. Town of Woodway*, CPSGMHB No. 98-3-0012 (Final Decision and Order, January 8, 1999), p. 13.

with its overlapping buffers and mitigation requirements would be difficult, and lower densities may be justified.

Any jurisdiction using low densities to protect critical areas should provide a discussion of how these three factors apply. The analysis should show why a project-level regulatory approach using the critical areas ordinance, acting on its own, would not protect these functions and values. The record should document the scientific basis for these conclusions and should also show that the low-density designations are limited to those areas necessary to protect function and value.

Protecting Neighborhood Character

The GMA calls for a range of urban densities and housing types, but the range of urban densities must be urban. Lower densities should not be used as a tool to perpetuate pre-GMA patterns of low-density residential development. Although proposals to allow for infill development are controversial, design tools can be used to lower the perception of density and improve the livability of urban neighborhoods.

Many neighborhoods and small towns built before World War II were developed at 6-8 du/acre. It was also common to intersperse single-family detached housing with small-scale, multifamily or retail buildings on corner lots. Maintaining and perpetuating this pattern of development allows the community to achieve the benefits of compact development without changing the visual character of the community.

Low-density zoning as a means of perpetuating pre-GMA large lot development in urban areas is not generally consistent with Goals 1 and 2 of the GMA and a local government's obligation to accommodate projected population growth. The CPSGMHB has been presented with, and found out of compliance, a number of plans containing policies that would prohibit development at urban densities in an effort to protect and preserve the suburban or semirural character of existing neighborhoods. There is not a requirement to force infill construction within existing neighborhoods, but land use and zoning tools cannot be used to prohibit infill at urban densities.[20]

In *MBA v. Pierce County*, the CPSGMHB discussed the GMA's goal to encourage the preservation of existing housing stock, and its requirement to ensure the vitality and character of established residential neighborhoods.[21] However, as the board stated, "any opportunity to perpetuate an 'historic low-density residential' development pattern, [in the subarea], ended in 1994 when the county included the area within the UGA."[22]

Preserving existing neighborhoods can also be accomplished by developing design standards to encourage compact development that is attractive, safe, and consistent with neighborhood character, historic preservation, or other desired features. As development densities increase,

[20] ibid, p. 25.

[21] RCW 36.70A.020(4) and 36.70A.070(4).

[22] *Master Builders Association & Terry Brink v. Pierce County*, CPSGMHB No. 02-3-0010, (Final Decision and Order, February 4, 2002), pp. 14-15.

ensuring good urban design will become increasingly important. Design standards can help reduce negative perceptions of density by ensuring buildings will be architecturally interesting and well integrated with their neighborhoods. For example, standards can regulate features such as setbacks, placement of parking and garages, façade treatment, building bulk, and scale to ensure that they are well received by the community. Many design codes strive to produce multifamily structures that resemble single-family homes, and/or to produce higher density single-family dwellings that appear less dense.

The U.S. Department of Housing and Urban Development has developed a Web site that includes a checklist of design features for good housing design and a series of lectures regarding density. *Demystifying Density, Part 2 of Strategies for Creating Higher Density Housing* at *www.designadvisor.org* is particularly interesting. CTED hosts its own Web site at *www.cted.wa.gov/affordablebydesign*, which highlights 13 developments that received the Director's Award for excellence in planning and design of higher density affordable housing. Case studies on each development, with photos and interviews, can be browsed for information on location, planning policies, zoning, design, unit size, density, affordability, and financing.

Managing a Lack of Adequate Public Facilities

Achieving urban densities requires the provision of adequate public facilities. The GMA does not define what constitutes adequate facilities and does not require that they be provided immediately throughout the urban area. The GMA requires a Capital Facilities Element that supports the Land Use Element by planning for the infrastructure necessary to support development and showing that this plan is fiscally realistic. In the Capital Facilities Element, local governments set level of service standard, which define what constitutes adequate public facilities.[23] Urban development generally requires, at a minimum, transportation infrastructure, public water, and sanitary and storm sewer.

The CPSGMHB has held that the GMA creates an affirmative duty for cities to accommodate the growth that is allocated to them through the county population allocation process. This duty means that a city's comprehensive plan must include: (1) a future land use map that designates sufficient land use densities and intensities to accommodate any population and/or employment that is allocated; and (2) a Capital Facilities Element that ensures that, over the 20-year life of the plan, needed public facilities and services will be available and provided throughout the jurisdiction's UGA. Lower densities are not justified simply because an area does not currently have sufficient services to support compact urban development.[24] Instead, jurisdictions are expected to plan for development to align with the provision of the needed urban services. If a developer wants to proceed in advance of the availability of planned services, they may be required to pay for the extension of services at the time of subdivision.

Development regulations must also ensure that achieving compact development in the long term is not precluded by short-term development patterns. For example, if urban services are not

[23] WAC 365-195-315(2)(b) is advisory, but includes strategies for better implementation of GMA goals.

[24] *Hensley v. City of Woodinville*, CPSGMHB No. 96-3-0031, (Final Decision and Order, February 25, 1997), p. 6.

available to an area in the short term, the development regulations may not allow a development pattern that precludes achieving urban densities when urban services become available.[25]

An example of a strategy to allow some development without precluding future urban development is contained in the City of Lacey's zoning code. Title 16.13.050(C) requires that areas without sewer be developed in a manner that maintains long-term potential to achieve minimum required densities and efficient provision of sewer once sewer becomes available.

Areas developing without sewer must meet the following requirements:

1. The Health Department must review and approve plans for alternative sewage disposal.
2. Lots must be clustered in a configuration that results in urban size lots with one large reserve lot for future development.
3. Clustered lots must be between 5,000 and 10,890 square feet: (Lacey's low-density zone).
4. Subdivisions and short subdivisions must have a statement on the face of the plat or short plat that when sewer becomes available to the area clustered lots shall hook up to sewer at each lot owner's expense. Such requirements shall also be provided for in protective covenants.

Some jurisdictions have used urban reserve zones or development phasing to prevent premature development for those portions of the UGA that are not yet served with adequate facilities, especially sewer and stormwater. This will help to phase future urban development in an orderly and cost-effective manner. If this zone is for planned residential use, shadow platting (planning subdivision and lot layout without formally subdividing) and clustering techniques may be used so that reasonable use may still be made of the property (by constructing a residence, for example) while configuring the lot(s) so that future rights-of-way and sites for future lots are preserved. The remaining lot(s) or sites may be further developed to urban densities when urban services are available.

Flexible Development Regulations to Achieve Urban Densities

A flexible approach to regulating development can also facilitate development of more compact communities. The following are a number of tools communities have used to encourage more compact urban development. When reviewing development regulations, there are a number of ways to remove barriers to the development of more compact communities. These tools can help facilitate infill development and can help establish greater certainty and flexibility in the development process. These generally provide alternatives to a reliance on establishment of minimum lot sizes as the sole means of governing residential density in single-family residential zoning districts.

Increased Base Densities

Where appropriate, allowing more housing units per acre facilitates a greater variety of housing options and makes more efficient use of scarce land resources. Higher densities also reduce sprawl development and make the provision of services more cost effective. Jurisdictions may

[25] *Master Builders Association & Terry Brink v. Pierce County*, CPSGMHB No. 02-3-0010, (Final Decision and Order, February 4, 2003), p. 8.

change the comprehensive plan and development regulations, as necessary, to encourage higher densities where they can be accommodated within UGAs. For example, 6 to 8 dwelling units per acre is a common historical density in many cities. Higher densities of 8 to 12 dwelling units or more are encouraged adjacent to shopping areas and transportation hubs such as transit stations.

Density Bonuses

Some communities allow bonus densities in certain areas in exchange for a higher level of design or amenities. Bonus densities may also be allowed in exchange for other public benefits, such as affordable housing or open space preservation. Developments that achieve a higher level of urban design and construct public spaces to a higher standard can provide many benefits while achieving neighborhoods that are more compact. This can also be done within the context of a planned residential development. The City of Tacoma and the City of Sumner, among others, have successfully permitted developments that take advantage of bonus densities in exchange for using the city design standards.

Figure 1: New Housing at urban densities in Poulsbo.

Clustering

Clustering allows more efficient use of land, in addition to providing open space. Clustering places the same number of units that would normally be allowed in the zone clustered in a smaller area, leaving the remaining land as open space, recreational area, critical area protection, or forest cover integrated into a low impact development design or other useful public purpose. Allowing cluster development is particularly useful in situations where parcels contain critical areas. In some communities, a significant portion of the remaining vacant parcels may contain critical areas, steep slopes, or other features making development more difficult. Clustering provides some additional flexibility that can facilitate infill without creating pressure to reduce critical area protections or reduce necessary buffer width. Clustering can be combined with density bonuses as an incentive to achieve public purposes, however, bonus densities should not be relied on to achieve the 4 du/acre minimum.

Lot Size Averaging

This technique is similar to clustering. If the zoning ordinance establishes a minimum lot size, the land use designation is calculated based on the average size of all lots proposed for development, instead of each lot being required to be above the minimum lot size. Development proposals may create a range of lot sizes both larger and smaller provided the average lot size is within the range consistent with the zoning designation. Lot size averaging systems may specify a much lower minimum lot size as part of the dimensional standards to prevent extremely small lots.

Some critical areas ordinances also include provisions to allow platting with smaller lots than the underlying zoning would normally allow so that some of the development potential lost to critical areas and buffers can be transferred elsewhere on the development parcel. This is a form of lot size averaging. A good example of this technique is used by the City of Kalama and includes a sliding scale that allows some of the development potential contained by critical areas and for development parcels containing a large portion of critical area to be used elsewhere on site using their planned residential development (PRD) ordinance.

Minimum Densities

Zoning ordinances generally establish a maximum rather than a minimum density. It was conventionally assumed that market forces would cause development at the maximum yield in order to maximize profits. In a number of areas, this has not been the case. Some jurisdictions are establishing within their codes both a maximum and a minimum lot size to ensure that development allows the city to accommodate its needed population, promote appropriate urban densities, and efficiently use limited land resources. Zoning ordinances can establish minimum and maximum densities in each zone to ensure that development occurs as envisioned for the community. The City of Redmond establishes both minimum and maximum allowable densities for residential districts.

Planned Residential Developments

PRDs offer an alternative to standard subdivision procedures. PRDs allow for more flexibility in some standards, such as minimum lot size, in exchange for adherence to other standards, such as design standards. This additional flexibility can allow developments to work with difficult-to-develop sites. Many cities have PRD ordinances, but due to increased review requirements, it is not recommended that they be exclusively depended on to facilitate increased densities.

Narrow Street Widths

In addition to lot size, other design standards such as street standards have an effect on achievable density and increase the gross amount of land needed per dwelling unit. Narrowing street widths can significantly expand the achievable density of development parcels. They also slow neighborhood traffic, encourage pedestrian activity, enhance the sense of neighborhood, lower capital and maintenance costs, and create less urban run-off. CTED's *Model Code Provisions: Urban Streets and Subdivisions* (1998) provides some models for narrower streets. The development of low impact development standards for managing stormwater shows that there are also environmental benefits to reduced street width. More information about low impact development is available at the Puget Sound Action Team's Web site at *www.psat.wa.gov/Programs/LID.htm*.

Examples of Flexible Development Regulations

Regulatory Tools	Examples
Minimum and maximum densities	**City of Redmond – Title 20c.30.25-040** **City of Renton – Title 14-2-110**
Lot size averaging	**Snohomish County – SCC 30.23.210**
Combined urban amenities	**King County – Title 21A.14.180**
Zero lot line development	**City of Kent – Title 15.08.320**
Regulate density directly, small minimum lot size	**City of Lacey – Chapter 16.12**
Bonus densities for urban design	**City of Sumner – Chapter 18.24**
Density transfers for critical areas	**City of Kalama – Title 15.02.080D**
Lot size averaging	**Snohomish County – SCC 30.23.210**
Establishing maximum lot sizes	**City of Redmond – Chapter 20c.30.25-04** **City of Renton – Title 14-2-110**
Planned residential development options	**City of Edmonds – Chapter 20.23**

A Wider Range of Housing Choices

Although 4 du/acre represents the minimum density considered to be compact urban development, communities should strive for a variety of housing choices at a range of urban densities. Goal 4 (Housing) of the GMA calls for plans to promote a variety of residential density and housing types. Providing a range of differing types of housing can help to promote affordable housing and to ensure a housing stock that provides housing types suitable to an increasingly diverse range of housing needs in the market. There are also examples of historic structures such as schools, office buildings, and even warehouses being converted into multifamily housing. Demographic trends are increasing the demand for a greater variety of housing types. In the King County metropolitan area, there is a proven demand for midlevel densities in the 10-20 units per acre range, especially. This range is well suited to infill and redevelopment within existing areas and at scales smaller than a regional urban center.[26]

[26] *Housing Stock*, Quarterly Newsletter of the Housing Partnership, December 2003, p. 2. *www.warealtor.com/government/policies/fillingspaces.pdf.*

Accessory Dwelling Units

Figure 2: Accessory dwelling unit over a garage in an existing residential neighborhood.

Accessory dwelling units provide another housing option. Under the GMA, they are required for communities with populations over 20,000 people [RCW 36.70A.400 and 43.63A.215(3)]. They preserve neighborhoods as local residents age and give them a smaller place to live while allowing them to stay in their neighborhood. Densities are increased within existing developed areas with minimal visual disruption. Virtually every large community in Washington has provisions allowing accessory dwelling units. Washington's Municipal Research & Services Center provides a good resource discussing accessory dwelling units at w*ww.research.aarp.org/consume/d17158_dwell.pdf* and hosts links to municipal codes that permit accessory dwelling units.

Duplexes, Townhomes, and Condominiums

A wider range of housing types provides additional affordable housing options and generally allows more residential units than would be achieved by detached homes alone. Permitting duplexes, townhomes, and condominiums in both mixed-use and primarily single-family residential districts of UGAs helps to provide additional housing choices. For example, the City of Portland, Oregon, permits duplexes on corner lots within single-family residential districts.[27]

Cottage Housing and Small Lot Single Family

These types of development have become an increasingly popular way to provide reasonably priced housing while retaining the single-family style. Densities are typically up to 10 or 12 units per acre. The cities of Redmond and Shoreline were among the first Washington cities to develop cottage housing ordinances, which include specific design requirements. The cost efficiencies of small lots can provide expanded housing ownership opportunities to broader income ranges and provide additional variety to available housing types. The City of Seattle zoning code (SMC 23.43.008) allows small lot development on lots with a minimum size of 2,500 square feet.

Housing Mixed with Other Uses

A growing number of communities are returning to the tradition of allowing residential uses on the upper floors of buildings in existing downtowns or in newly developing mixed-use commercial developments. This trend is occurring at a variety of scales from regional urban centers to small-scale, mixed-use neighborhood centers. The combination of mixed uses, higher densities, interconnected neighborhoods, and a variety of housing types can serve different income levels. Housing can be mixed vertically, with housing located in the upper stories. It can

[27] City of Portland Zoning Code, Title 33.110.

be mixed horizontally, with multifamily units intermingled with commercial uses in an interconnected fashion. It can even be mixed within the unit itself in "live-work" units. The defining characteristic is that compatible uses are interconnected within a defined district. These types of development provide locally focused shopping opportunities and urban amenities (parks, schools, civic buildings, etc.) together with increased densities that increase livability and reduce the dependence on personal automobiles. They are a more efficient use of land, facilitate a wider range of transportation options (due to connected streets), and provide for urban services more cost-effectively.

Figure 3: Studios over retail in Sumner.

Mixed-use areas can provide a broader variety of housing options, allowing people to live, work, and shop in nearby areas. Mixed uses in the same area encourage more pedestrian and transit-friendly access, make goods and services accessible to non-drivers, reduce peoples' dependence on personal vehicles for mobility, and reduce the land required for parking space. Development regulations should allow compatible residential and commercial activities to occur in many of the same buildings and areas. In some cases, this can be used to allow shared parking, which requires a significant amount of urban land.

Examples of Housing Options

Housing Options	Examples
Cottage housing	**City of Redmond –Title 20C.30.52** **City of Shoreline – Title 20.40.300**
Small lot or cottage housing	**City of Seattle – Title 23.43.008**
Corner duplexes	**City of Portland – Title 33.110**
Co-housing	**City of Bellingham – Ordinance #1998-08-062**
Mixed-use district	**City of Tacoma – Destination Downtown** **City of Spokane – Downtown Area Zoning SMC 11.19.194**

How to Know When Adequate Densities Have Been Planned For

The GMA requires communities to plan for their share of the anticipated population growth as provided by the state and county population allocation process. Jurisdictions are required to include areas and densities sufficient to permit the urban growth that is projected to occur in the succeeding 20-year period. CTED recommends that a community demonstrate in the Land Use Element how it intends to accommodate its anticipated population forecasts within its land use designations. It is helpful to show a table of land use designations, the total acreage so designated, the range of densities allowed, and an estimation of the population capacity they represent. If employment forecasts are available, tracking land needed for commercial or industrial land can be accomplished the same way. The Land Use Element should also show which zoning districts implement which future land use designations.

Housing Type/Density Categories:	**Low SF 4-6 du/ac**	**Moderate MF 12-18 du/ac**	**High MF 18-30 du/ac**	**Total**
A. Total net buildable acres of vacant, partially-used, and underutilized land, available for development of housing	397.4	16.4	12.8	426.6
B. Assumed density of development at start of planning period	5.38 du/ac	14.5 du/ac	21.8du/ac	
C. Estimated capacity in dwelling units (A*B)	2,136	238	278	2,652
D. 20-year projected increase in housing units at start of planning period allocated through county/city process				2,419
E. Actual net increase in housing units since start of 20-year planning period	142	30	35	207
F. Actual net density of new housing per acre observed during density review period	4.3 du/ac	16.2	25.5 du/ac	
G. Future capacity in units at observed densities (A*F)	1,708.8	265.7	326.4	2,300.9

CTED's Buildable Lands Program is required for Clark, King, Kitsap, Pierce, Thurston, and Snohomish counties. One of the tools developed for this program was a useful methodology for connecting densities in the Land Use Element to the projected population. The table above may be used to make this calculation and monitor growth. This methodology is also helpful in conducting a land capacity analysis to determine the area needed within a UGA to accommodate the growth projected over the next 20 years.

Ensuring the availability of a range of housing choices, at a range of urban densities, is critical to ensuring the continued economic development of the state without compromising the environmental values that make Washington a great place to live. Protecting open space, preserving rural character, and conserving farmland all will require that urban areas develop as compact, well designed communities that contain a full range of urban services. A wide variety of tools exist and have been successfully applied throughout the state and in many cases the market has responded. For more information about these topics, a list of resources and good examples to choose from follows.

Conclusion

Permitting a range of urban densities in your community is an important step in achieving the goals of growth management. A more compact urban form allows greater conservation of the rural landscape, facilitates the cost-effective provision of urban services, and helps to meet the diverse housing needs of the entire community. However, permitting higher densities is best accompanied by strategies to ensure that new development uses high quality design techniques and is provided with adequate public facilities.

Relevant CTED Guidebooks

Issues in Designating Urban Growth Areas, Part I – Providing Adequate Urban Area Land Supply, 1992.

The Art and Science of Designating Urban Growth Areas, Part II – Some Suggestions for Criteria and Densities, 1992.

Buildable Lands Program Guidelines, 2000.

Measures for Providing Attractive, Compact Urban Areas, 2001.

Model Code Provisions: Urban Streets and Subdivisions, 1998.

Preparing the Heart of Your Comprehensive Plan: A Land Use Element Guide, 1993.

Assessing Your Communities Housing Needs: A Guide to Doing a Housing Needs Assessment, 1992

Other Resources

Cost of Sprawl 2000, Report No. 74. Transportation Research Board. National Research Council. TCRP, 2000. *www.tcrponline.org/bin/publications.*

Creating Great Neighborhoods: Density in Your Community. Local Government Commission. *www.lgc.org.*

Demystifying Density, Part 2 of Strategies for Creating Higher Density Housing, a Web site that includes a checklist of design features for good housing design and a series of lectures regarding density. U.S. Department of Housing and Urban Development. *www.designadvisor.org.*

Getting to Smart Growth I and II, two free booklets of 100 policies and strategies for implementing Smart Growth. Smart Growth Network, 2003. *www.smartgrowth.org.*

Infill Development Strategies for Shaping Livable Neighborhoods, Municipal Research & Services Center of Washington, Report No. 38. 1997. *www.mrsc.org/Publications/textfill.aspx.*

Filling Spaces, Ten Essentials for Successful Urban Infill Housing. King County Housing Partnership. November 2003.

Puget Sound Action Team's Web site on Low Impact Development at *www.psat.wa.gov/Programs/LID.htm*.

Smart Growth Zoning Codes: A Resource Guide. Local Government Commission. 2003. *www.lgc.org*.

Strategies and Tools to Implement Transportation-Efficient Development: A Reference Manual, Phase 2 of Integrating Land Use and Transportation Investment Decision-Making. Washington State Department of Transportation. 2003. *www.wsdot.wa.gov/mobility/TDM/TDMpubl.html*.

Muro, Mark and Puentes, Robert. *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns*. The Brookings Institution Center on Urban and Metropolitan Policy. 2004. *www.brookings.edu/urban*.

Commercial and Mixed Use Development Code Handbook. Oregon Transportation and Growth Management Program. *www.lcd.state.or.us/tgm.*

Model Development Code and Users Guide for Small Cities. Oregon Transportation and Growth Management Program. *www.lcd.state.or.us/tgm/pub/model_code.htm.*

Relevant Hearings Board Cases for the Central Puget Sound

- *Bremerton, et al. v. Kitsap County*, CPSGMHB No. 95-3-0039c (Final Decision and Order, October 6, 1995).
- *Benaroya, et al. v. City of Redmond*, CPSGMHB No. 95-03-0072 (Final Decision and Order, March 25, 1996).
- *Litowitz v. City of Federal Way*, CPSGMHB No. 96-3-0005 (Final Decision and Order, July 22, 1996).
- *Hensley vs. City of Woodinville*, CPSGMHB No. 96-3-0031, (Final Decision and Order, February 25, 1997).
- *LMI v. Town of Woodway*, CPSGMHB No. 98-3-0012 (Final Decision and Order, January 8, 1999).
- *Master Builders Association & Terry Brink v. Pierce County*, CPSGMHB No. 02-3-0010, (Final Decision and Order, February 4, 2003).

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